

**English translation of the claims amended under Article 19 PCT of the
International Patent Application No. PCT/CH2003/000247 "Intervertebral implant"
in the name of Mathys Medizinaltechnik AG**

AMENDED CLAIMS

**Received by the International Bureau on April 1, 2004 (1.4.2004);
original claim 1 amended;
original claims 2-34 unchanged
(1 page)**

1. An intervertebral implant (1) with a central axis (2), comprising
 - A) a bottom cover plate (3) and a top cover plate (4), each with an external surface (7, 8) extending transversely to the central axis (2),
 - B) a central part (10) with a sheathing (12) that surrounds a fibre system (5)
5 provided between the cover plates (3, 4), wherein
 - C) the fibre system (5) is joined with the cover plates (3, 4) at least partially, characterised in that
 - D) the fibre system (5) is wound around the central part (10), and
 - E) the sheathing (12) comprises an elastic sheathing body (25) that surrounds the
10 central part (10) on the periphery and is made from a homogeneous material and is passed through by the fibre system (5).
2. An intervertebral implant (1) according to claim 1, characterised in that the entire
15 fibre system is embedded in the elastic sheathing body (25).
3. An intervertebral implant (1) according to claim 1, characterised in that the fibre
system is only partially embedded in the elastic sheathing body (25).
4. An intervertebral implant (1) according to claim 3, characterised in that the fibre
20 system (5) has a radial thickness δ relative to the central axis (2) and the sheathing
body (25) has a radial thickness d , and the $\delta/d \times 100\%$ ratio is in a range between
80% and 350%.
5. An intervertebral implant (1) according to any one of claims 1 to 4, characterised in
25 that the fibre system (5) can move relative to the sheathing body (25).

6. An intervertebral implant (1) according to any one of claims 1 to 4, characterised in that the fibre system (5) is so mounted that it cannot move relative to the sheathing body (25).